(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 21 September 2000 (21.09.2000)

PCT

(10) International Publication Number WO 00/54581 A3

- (51) International Patent Classification7: A01K 67/027, A61K 49/00, C12Q 1/02, 1/66, 1/68
- (21) International Application Number: PCT/US00/07296
- (22) International Filing Date: 17 March 2000 (17.03.2000)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/124,725 09/527,061 17 March 1999 (17.03.1999)

16 March 2000 (16.03.2000)

- (71) Applicant: XENOGEN CORPORATION [US/US]; 860 Atlantic Avenue, Alameda, CA 94501 (US).
- BELLINGER-KAWAHARA, Carole; (72) Inventors: Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501 (US). CONTAG, Pamela, Reilly; Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501 (US). HUBBARD, Alan; Xenogen Corporation, 860 Atlantic Avenue, Alameda, CA 94501 (US).
- (74) Agent: SHOLTZ, Charles, K.; Xenogen Corporation, Intellectual Property Department, 860 Atlantic Avenue, Alameda, CA 94501 (US).

- (81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD. SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW. ..
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- (88) Date of publication of the international search report: 26 April 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANIMAL MODELS AND METHODS FOR SEPSIS

(57) Abstract: Methods for selecting a candidate drug for treating sepsis are disclosed. The methods involve labeling a sepsiscausing pathogen with a reporter and monitoring the progress of infection by detecting levels of the reporter in animals treated with test compounds or drugs. The comparisons may be made between experimental and control animals, as well as within a single animal or group of animals. Also disclosed is a method for predicting an expected time of death of an experimental animal in a model system of sepsis using data generated in the initial part of the experiment.

INTERNATIONAL SEARCH REPORT

Intern nai Application No

			1017 00 00,	7 07 230	
A. CLASSI IPC 7	FICATION OF SUBJECT MATTER A01K67/027 A61K49/00 C12Q1/0)2 C12Q1/66	C120	1/68	
According to	o international Patent Classification (IPC) or to both national classif	ication and IPC	<u>-</u>		
B. FIELDS	SEARCHED			***************************************	
Minimum do	ocumentation searched (classification system tollowed by classification AO1K A61K C12Q	alion symbols)			
Documenta	tion searched other than minimum documentation to the extent that	such documents are includ	ed in the fleichs se	arched	
Electronic d	ata base consulted during the international search (name of data b	ase and, where practical, s	earch terms used		
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the re	elevant passages		Relevant to claim No.	
Х	CONTAG C H ET AL: "PHOTONIC DET BACTERIAL PATHOGENS IN LIVING HO MOLECULAR MICROBIOLOGY,GB,BLACKW	STS"		1-5,7-15	
	SCIENTIFIC, OXFORD, vol. 18, no. 4, 1995, pages 593- XP000578109 ISSN: 0950-382X cited in the application	603,			
Υ	figures 2-5			6	
x	CONTAG P R ET AL: "BIOLUMINESCE INDICATOR IN LIVING MAMMALS" NATURE MEDICINE, US, NATURE PUBLIS vol. 4, no. 2, 1998, pages 245-2 XP000914588 ISSN: 1078-8956 cited in the application	1-5,7-15			
Y	page 246, column 1, paragraph 2	6			
		-/			
الشا	er documents are listed in the continuation of box C.	X Patent family me	embers are listed i	n annex,	
*Special categories of cited documents: *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international *X* document of particular relevance; the constant the principle or the international in the principle or the international in the principle or the international in the principle or the international internati				he application but ory underlying the	
which in citation *O* docume	nt which may throw doubts on priority claim(s) or s cited to establish the publication date of another or other special reason (as specified) int referring to an oral disclosure, use, exhibition or	cannot be considered involve an inventive to "Y" document of particular	d novel or cannot step when the doc r relevance; the ci d to involve an inv	be considered to nument is taken alone almed invention entive step when the	
other n "P" docume later th	nearis nt published prior to the international filling date but an the priority date claimed	ments, such combina in the art. *&* document member of	_	•	
Date of the a	ictual completion of the international search	Date of malling of the			
20	November 2000	04/12/2000			
Name and m	nalling address of the ISA European Patent Office, P.B. 5818 Patentiaan 2	Authorized officer			
	NL - 2260 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016	Lonnoy, O			

INTERNATIONAL SEARCH REPORT

Inten. Inal Application No PCT/US 00/07296

		PC1/US 00/07296					
	C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Calegory *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.					
Υ	WO 97 18841 A (UNIV LELAND STANFORD JUNIOR) 29 May 1997 (1997-05-29) cited in the application claims 9-12,14,16	1-5,7-15 6					
Y	ARNOLD L ET AL: "Predictive value of several signs of infection as surrogate markers for mortality in a neutropenic guinea pig model of Pseudomonas aeruginosa sepsis" LABORATORY ANIMAL SCIENCE, vol. 47, no. 6, December 1997 (1997-12), pages 617-623, XP000960981 abstract	6					
T	FRANCIS K ET AL: "Monitoring bioluminescent Staphylococcus aureus infections in living mice using a novel luxABCDE construct" INFECTION AND IMMUNITY, vol. 68, no. 6, June 2000 (2000-06), pages 3594-3600, XP002153182 the whole document	1-15					
A	EP 0 864 648 A (SUNTORY LTD) 16 September 1998 (1998-09-16)						

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inten Inal Application No PCT/US 00/07296

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9718841	A	29-05-1997	CA US AT AU DE EP ES	2237983 A 5650135 A 193453 T 4285096 A 69517344 D 0861093 A 2147621 T	29-05-1997 22-07-1997 15-06-2000 11-06-1997 06-07-2000 02-09-1998 16-09-2000
EP 0864648	Α	16-09-1998	WO	9812313 A	26-03-1998